

**U.S. Environmental Protection Agency
Science Advisory Board
Secondary Data Use Subcommittee of the Executive Committee**

Summary Minutes of Public Meeting
December 15&16, 1998

COMMITTEE: Secondary Data Use Subcommittee (SDUS) of the Executive Committee (EC) of the U.S. Environmental Protection Agency's Science Advisory Board (SAB). (See Roster - Attachment A.)

DATE AND TIME: December 15 & 16 from 9:00 a.m. to 5:00 p.m. Eastern Time (See Federal Register Notice - Attachment B).

LOCATION: Science Advisory Board Conference Room, M3709, US EPA, 401 M Street, SW, Washington, D.C. 20460

PURPOSE: The purpose of this meeting was to: review CEIS's draft data suitability review document for technical quality, comprehensiveness and clarity; provide consultation on the next steps in CEIS's review of databases for secondary use; and receive a briefing on CEIS's approach to reviewing geographically based environmental indices.

ATTENDEES: Committee Members (See Attachment A, Committee Roster. All current members were present for the entire meeting except Drs. Bailor and Hopke.); Ms. Anne Barton (Designated Federal Official, SAB Staff); Ms. Wendy Cleland-Hamnett, Dr. N.P. Ross, Mr. Ronald Shafer, and Dr. Barry Nussbaum (of the Center for Environmental Information and Statistics, US EPA), Ms. Margaret Schneider. (See Attachment D, Meeting Sign-In Sheets for other Attendees.)

MEETING SUMMARY:

The meeting followed the issues and general timing as presented in the meeting Agenda, except where otherwise noted (see Meeting Agenda - Attachment C). There were no written comments submitted to the Committee, nor were there any requests made to present public comments during the meeting.

Welcome and Introductions - Dr. Morton Lippmann, Chairman, opened the meeting at 9:00 a.m. welcoming members and consultants (Roster, Attachment A), and reviewed the background for the meeting (Attachment E, project proposal). Anne Barton, Designated Federal Official for the Secondary Data Use Subcommittee requested that panel members introduce themselves and make a voluntary statement for the record regarding their research interests and experiences related to the review topic. No financial interest or other "particular matters" were identified.

Discussion with Wendy Cleland Hamnett. Director of CEIS

Ms. Cleland Hamnett gave a summary of CEIS and some of its major projects in addition to the Secondary Use Project. Members of the Subcommittee were particularly interested in the projects dealing with customer needs, which appears to have the potential to provide important information to

the secondary use quality issue. Ms. Hamnett and the Subcommittee also discussed the new information office. Ms. Hamnett, Dr. Ross, and others will brief the group who will be deciding upon next steps for this reorganization. The secondary data use quality project will be a part of that briefing.

Task I: Review of CEIS “Draft Data Suitability Review

Agency staff and members of the Subcommittee agreed that there was no need for a formal briefing, so the Subcommittee entered directly into commenting on the draft document.

The Subcommittee found that the document was carefully and thoughtfully assembled, and that it was an excellent first step in the process leading to a more widespread and productive utilization of historic EPA datasets collected largely for regulatory purposes. The SDUS engaged in a productive dialog with EPA staff during the review in order to clarify aspects of the intent, findings, and extent of coverage of the document, and to develop recommendations for revising the document in ways that would make it a more useful and transparent description of EPA databases and their usefulness for secondary analyses. The subcommittee also suggested several activities in addition to the reviewed document, which would contribute to the appropriate use of EPA databases for secondary purposes. All of these comments and suggestions will be described in the Subcommittees report, which is expected to be available in draft form by late January, 1999.

At 3:30 p. m. the Subcommittee began drafting the report. At 5:00 p.m. Dr. Lippmann adjourned the meeting for the day, to resume at 9:00 a.m. the following morning.

Task III: Briefing on CEIS Analysis of the Index of Watershed Indicators (IWI)

CEIS regards index development as a secondary use of data. The IWI is a good example of such an index. The CEIS staff briefed the Subcommittee on their work (to date) on the IWI. The analysis of Indices present different challenges to a secondary use quality review because multiple information is “rolled up” into the summary index. In the case of the IWI, this is further complicated by the fact that the lower level information used for the index is in itself “rolled up” from multiple measures and judgements. None of the 15 or so lower level components used to produce the IWI is a simple measure.

CEIS staff is conducting a “top down” approach to analyzing this index, starting with the algorithm used to develop the overall index from the lower level components.

CEIS staff explained that they considered a “bottom up” approach of starting with measures and reviewing the quality of these before looking at the “roll-ups” that produced the 15 components and only then proceeding to the “roll-up” of the index itself. However, this clearly would have taken a very long time before they were ready to consider the index itself. CEIS needed to make some judgements in a much shorter time in order to decide what needed to be done to include the IWI in the set of databases provided on the CEIS home page. (The IWI is already available on the Internet at “<http://www.epa.gov/surf/iwi>”, but the Agency wants to provide it on the official CEIS site as well.)

Therefore, they are taking the “top down” approach, looking at the following issues:

1. Documentation: The basic requirement for the IWI to appear on the CEIS web site is that there be sufficient documentation so that anyone who has access to the underlying components can independently reproduce the index. CEIS and the Office of Water have been working on this issue and appear to have a satisfactory solution.

2. The “roll-up” of the initial 15 components. This has been the major focus of recent work. It includes looking at the internal consistency, relationships of individual components to one another and to the index, the derivation of some of the individual components themselves, and consideration of the need for multiple indices.
3. Review of the introduction of new components by the program office.
4. Comparison of the index (or indices, depending on the results of step 2) to other measures of watershed condition.

Dr. Nagaraj Neerchal, a professor at the University of Maryland, is working with CEIS on this project. He presented some of the analyses being done in support of step 2. These focus on visual displays of the components relative to each other and to the overall index.

The Subcommittee had a number of questions about the IWI components which were answered by CEIS and Office of Water staff. They also discussed the varying needs of users; the need for professional judgement in putting together indices; the complementary role of this Subcommittee to that of the SAB Environmental Processes and Effects Committee who are reviewing the IWI as an indicator of ecological condition; and possible future role of the subcommittee in helping CEIS deal with Indices. Dr. Lippmann congratulated CEIS on its pioneering role in this area and looked forward to reviewing the “lessons learned” from CEIS’s initial analysis of an index.

Discussion With Ms. Margaret Schneider, Associate Deputy Administrator: Information Management at EPA

Ms. Schneider explained that the Administrator believes that a stronger focus on information access and quality is critical to EPA in the future. In order to provide this focus, the Agency is reorganizing its information resources. The Administrator’s December 10 message [Attachment G] presents an overall approach. Now Ms. Schneider and a few others need to take the next step of planning to “make it happen”. This includes putting together a detailed structure, planning for Agency-wide review and approval, and listing the important near term projects. Ms. Schneider asked the Subcommittee for suggestions of the most important projects.

The discussion that followed included questions about the level of the quality function within EPA’s organization, expertise of staff, routes for public feedback, size of the new organization, the role of the Advisory Board, and the extent to which other Agencies are planning a similar change. Dr. Lippmann congratulated the Agency on being at the forefront of this focus on information and asked how the SAB could help. Ms. Schneider said the most immediate issue for SAB attention is providing advice on how to characterize the quality of data that the Agency will be releasing for public use.

Next Steps

The Subcommittee and CEIS staff agreed to use most of the remaining time for the discussion of Indexes, summarized above. There was also discussion of the possible roles of scientific advisory groups as CEIS continues its works. The discussants concluded that SDUS activities could include many but not all of these. The possibility of instituting a standing SAB committee on information issues, was raised. This is an issue to be discussed with Agency officials and the SAB Executive

Committee.

At 3:00 p.m. Dr. Lippmann adjourned the meeting.

Respectfully Submitted:

Anne Barton
Designated Federal Official

Certified as True:

Morton Lippmann, Ph. D.
Chair, Secondary Data Use Subcommittee

List of attachments:

- A. Subcommittee Roster
- B. Federal Register Notice
- C. Meeting Agenda
- D. Sign-in Sheets
- E. Project Proposal
- F. Handouts for briefing on analysis of indices
- G. Administrator's December 10 message